



**FORD MOUNT
SD 250/350/450/550 4X4
1999 – 2004
INSTALLATION INSTRUCTIONS**

**Model No. 3219
Mount Assembly Box #67982**

⚠ CAUTION

Read this document before installing the snowplow.

⚠ CAUTION

See your WESTERN® outlet for application recommendations. The Selection List has specific vehicle and snowplow requirements.

SAFETY

SAFETY DEFINITIONS

⚠ WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

⚠ CAUTION

Indicates a situation that, if not avoided, could result in damage to product or property.

NOTE: Identifies tips, helpful hints and maintenance information the owner/operator should know.

Warning and Caution Label

⚠ WARNING

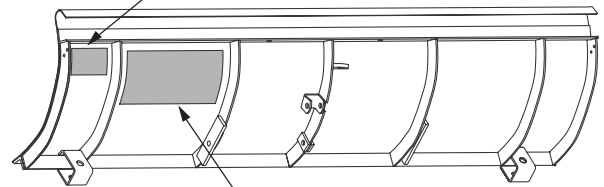
LOWER BLADE WHEN VEHICLE IS PARKED.
REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.
DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE AND BALLAST.

⚠ CAUTION

READ *OWNER'S MANUAL* BEFORE OPERATING OR SERVICING SNOWPLOW.
TRANSPORT SPEED SHOULD NOT EXCEED 45 MPH. REDUCE SPEED UNDER ADVERSE TRAVEL CONDITIONS.
PLOWING SPEED SHOULD NOT EXCEED 10 MPH.
SEE YOUR SALES OUTLET FOR APPLICATION RECOMMENDATIONS.

WARNING/CAUTION & INSTRUCTION LABELS

Become familiar with and inform users about the warning and instruction labels on the back of the blade.



Instruction Label

UltraMount[®] SYSTEM INSTRUCTIONS

MOUNTING PLOW (ON)

Read Owner's Manual for complete instructions.

STEP 1

After seating plow horns in receiver brackets, pull Handle up; Shoe will lift off the ground.

STEP 2

Pull and hold Lock Pin out; then rotate Handle UP and release Lock Pin. It must lock into UPPER hole. Stand Hook must grip Receiver Pin.

STEP 3

Plug in electrical connections. Repeat steps 1 and 2 on other side of plow.

STEP 3

Push down top of Shoe; Shoe will be on the ground. Repeat steps 2 and 3 on other side of plow. Back vehicle away.

STEP 2

Pull and hold Lock Pin out; then rotate Handle DOWN and release Lock Pin. It must lock into LOWER hole.

STEP 1

After lowering blade and turning control off, disconnect electrical connections.

REMOVING PLOW (OFF)

Read Owner's Manual for complete instructions.

67796

Patents: US 4,999,935; 5,420,480; RE 35,700; 6,145,222; 6,209,231; 6,253,470; 6,526,677; CAN 2,060,425; patents pending.

Lit. No. 66885

1

December 1, 2003

SAFETY - Continued

SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury, and/or equipment and property damage. Read and understand labels and the *Owner's Manual* before installing, operating, or making adjustments.

WARNING

Lower blade when vehicle is parked. Temperature changes could change hydraulic pressure, causing the blade to drop unexpectedly or damaging hydraulic components. Failure to do this can result in serious personal injury.

WARNING

Remove blade assembly before placing vehicle on hoist.

WARNING

The driver shall keep bystanders clear of the blade when it is being raised, lowered or angled. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

WARNING

Keep hands and feet clear of the blade and A-frame when mounting or removing the snowplow. Moving or falling assemblies could cause personal injury.

WARNING

Do not exceed GVWR or GAWR including blade and ballast. The rating label is found on driver-side vehicle door cornerpost.

CAUTION

Refer to the current selection list for minimum vehicle recommendations and ballast requirements.

CAUTION

To prevent accidental movement of the blade, always turn the ON/OFF switch to OFF whenever the snowplow is not in use. The control indicator light will turn off.

PERSONAL SAFETY

- Wear only snug-fitting clothing while working on your vehicle or snowplow.
- Do not wear jewelry or a necktie, and secure long hair.
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

SAFETY - Continued

FIRE AND EXPLOSION

⚠ WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately.

Be careful when using gasoline. Do not use gasoline to clean parts. Store only in approved containers away from sources of heat or flame.

VENTILATION




⚠ WARNING

Vehicle exhaust contains deadly carbon monoxide (CO) gas. Breathing this gas, even in low concentrations, could cause death. Never operate a vehicle in an enclosed area without venting exhaust to the outside.

TORQUE CHART

⚠ CAUTION

Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow including proper personal protective safety equipment.

Recommended Fastener Torque Chart (Ft.-Lb.)			
Size	 SAE Grade 2	 SAE Grade 5	 SAE Grade 8
1/4-20	6	9	13
5/16-18	11	18	28
3/8-16	19	31	46
3/8-24	24	46	68
7/16-14	30	50	75
1/2-13	45	75	115
9/16-12	66	110	165
5/8-11	93	150	225
3/4-10	150	250	370
7/8-9	150	378	591
1-8	220	583	893
Metric Grade 8.8 (Ft.-Lb.)			
Size	Torque	Size	Torque
M 6	7	M 12	60
M 8	17	M 14	95
M 10	35	M 16	155
These torque values apply to fasteners except those noted in the instruction.			

MOUNT INSTALLATION

⚠ WARNING

BlockerBeam™ tag provided must be attached to BlockerBeam when removed from truck. BlockerBeam must be reinstalled if plow mount is ever removed.

1. If vehicle is equipped with a BlockerBeam™ between the frame horns and behind the bumper, unbolt and remove it. Save for reinstallation if the plow mount is later removed from vehicle. Attach BlockerBeam tag to BlockerBeam using nylon tie strap provided.
2. Remove bumper by first detaching rubber flap and any electrical cords attached to bumper (vehicles with fog lamps and diesel). Remove the bumper fasteners and slide bumper forward until it is clear of the tow hooks. Remove and discard the two thin plates hanging from the bumper mounts.
3. Beginning on the driver-side, position the rear of the mount by fitting it between the leaf springs and the frame. Truck frame may have to be raised to provide clearance for mount installation. Check for and eliminate any interference with Ford nut retainers on bottom of frame.

⚠ CAUTION

To avoid damaging A/C condensers, heads of bolts should be on the inside, with nuts on the outside of (Part #22289) bracket; this will increase clearance with condenser.

4. Once the rear of the mount is in position, rotate the front of the mount into place and loosely secure by attaching a bracket (Part #22289) with two 1/2" x 1-1/2" cap screws, Gr. 8 flat washers and locknuts. (See Photo 1.) Heads of bolts should be on the inside. Slide mount rearward after attaching bracket and hardware.

NOTE: Rear bolt in step 3 can also be assembled by lifting the A/C condenser up in its attaching pocket and pulling it forward from its lower pocket. Assemble the bolt and lift and replace A/C condenser to its attaching pockets.

5. Loosely attach front of mount to bumper brackets on frame using 1/2" x 1-1/2" cap screws, flat washers and locknuts. (See Photo 1.)

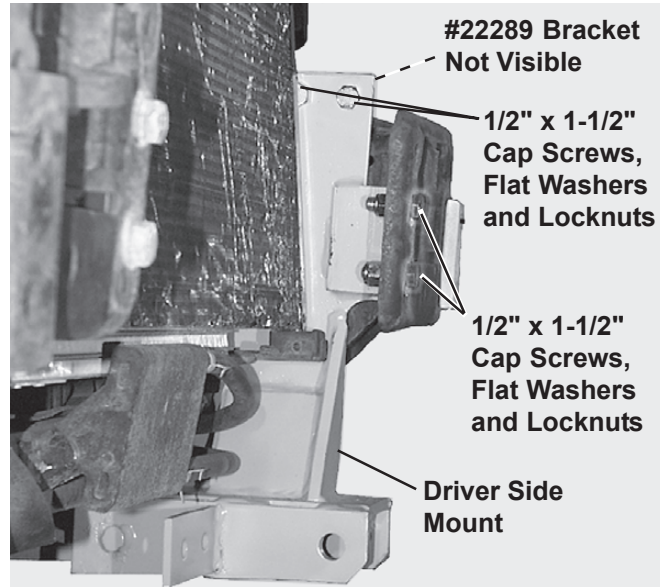


Photo 1

6. **For F-250, F-350 and all other vehicles with swaybar bracket:** Loosely attach rear of mount to swaybar bracket using 1/2" x 1-1/2" cap screws, one flat washer on top of swaybar bracket and one on bottom of mount slotted hole, and locknuts. (See Photo 2.)

For F-450, F-550, and all vehicles without swaybar bracket: Proceed to step 7.

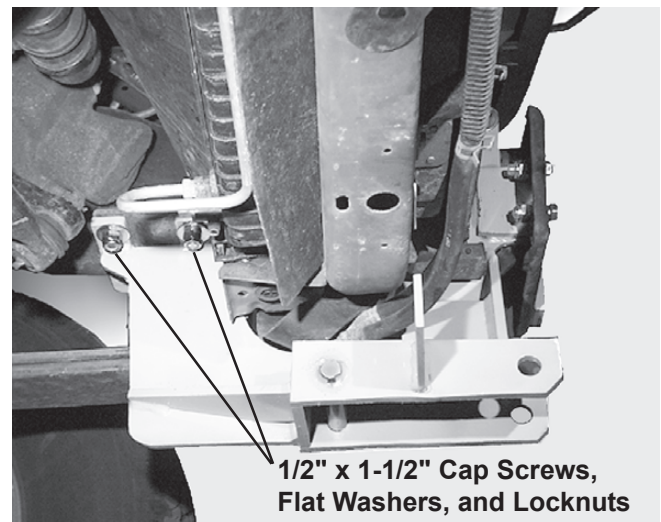


Photo 2

(Continued on next page.)

MOUNT INSTALLATION - Continued

7. Repeat steps 2-5 on passenger side.
8. Loosely attach cross bar between both mounts using 1/2" x 1-1/2" cap screws, flat washers, and locknuts. (See Photo 3.)

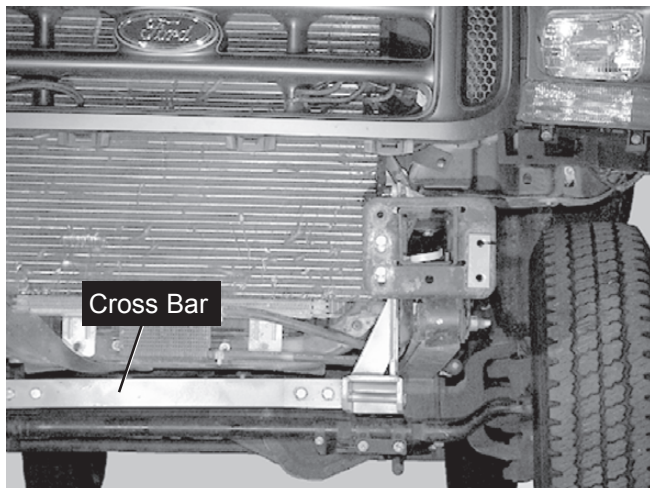


Photo 3

9. With the mount fitted snugly into position, clamp the brackets (#22289) to the top surface of the frame. Make sure the bracket is flush with the top frame surface and the shim welded to the bracket is flush with the smaller boxed frame section.
10. Tighten the fasteners at the front of the mount where it meets the bumper plate. These fasteners should now be toward the tops of the slotted holes in the bumper plate. (See Figure 1.)

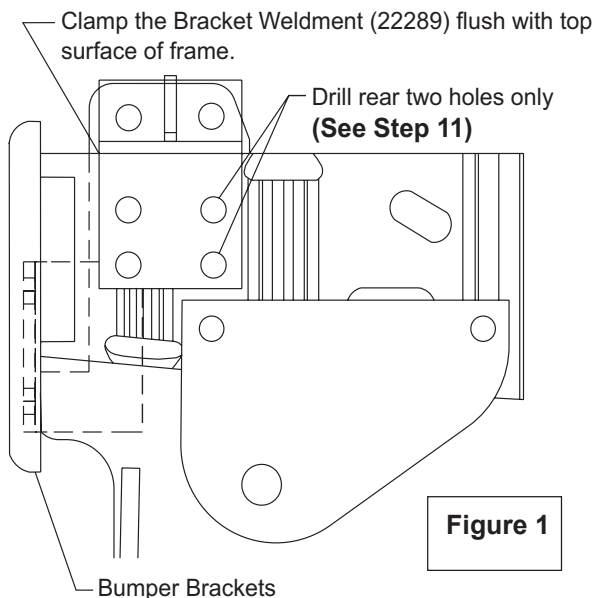


Figure 1

11. Attach rear of mount. (See Photo 4.)

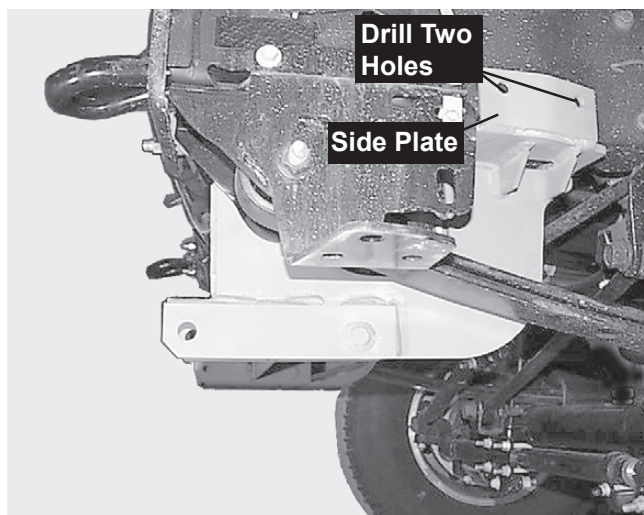


Photo 4

For F-250, F-350, and all other vehicles with swaybar bracket: With the rear of the mount tight against both the side and bottom of the frame, tighten fasteners running through swaybar bracket.

Mark and drill two 17/32" holes through the side of the frame using mount holes as guides. Fasten securely using two 1/2" x 1-1/2" cap screws with handles, flat washers and locknuts.

NOTE: To ensure a tight fit, loosen the swaybar bracket fasteners before tightening the cap screws with handles, then re-tighten the bracket fasteners.

For F-450, F-550, and all vehicles without swaybar bracket: With the rear of each mount tight against both the side and the bottom of the frame, mark and drill two 9/16" holes through bottom of frame using mount holes as guides. To facilitate drilling, remove mounts and drill smaller pilot holes to start.

Place a bushing between the mount and frame, centered over the rear hole. Fasten securely using two 1/2" x 1-1/2" cap screws with handles, flat washers and locknuts. Mark and drill two 17/32" holes through the side of the frame using mount holes as guides. Fasten securely using two, 1/2" x 1-1/2" cap screws with handles, flat washers, and locknuts.

(Continued on next page.)

MOUNT INSTALLATION - Continued

12. On driver and passenger side, drill the two rear holes in the brackets (#22289) and fasten using 1/2" x 1-1/2" cap screws, flat washers to inside of frame and locknuts. **(See Figure 1 on previous page.)** Tighten all fasteners at this time per torque chart provided on page 3 of these instructions.

NOTE: Front holes in #22289 bracket are not used at any time.

13. Use the cable ties to tie up cooling lines on the driver side forward of the front-most radiator. It is important to provide sufficient clearance between all portions of the cooling lines and the driver side mount.
14. Place 1/2" shims in place to space the bumper forward of the frame. Use cable tie to temporarily hold shim in place. Reinstall bumper and reattach any rubber flaps or electrical cords removed during bumper removal. **(See Photo 5.)**

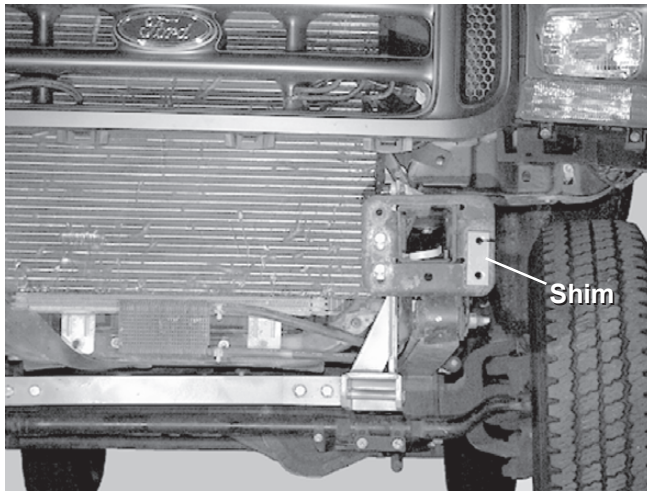


Photo 5

15. On driver side, slide the rear notch of the receiver over the pin at the rear of the mount U-bracket. Rotate the front of the receiver upward into the mount U-bracket until the holes in the mount line up with the hole through the receiver. Insert the receiver pin into the holes of the mount and receiver and align the hole in the receiver pin with the stud on the receiver. Insert the pin until the hairpin cotter can be inserted through the hole in the receiver stud. **(See Photo 6.)**

16. Repeat Step 14 on passenger side.

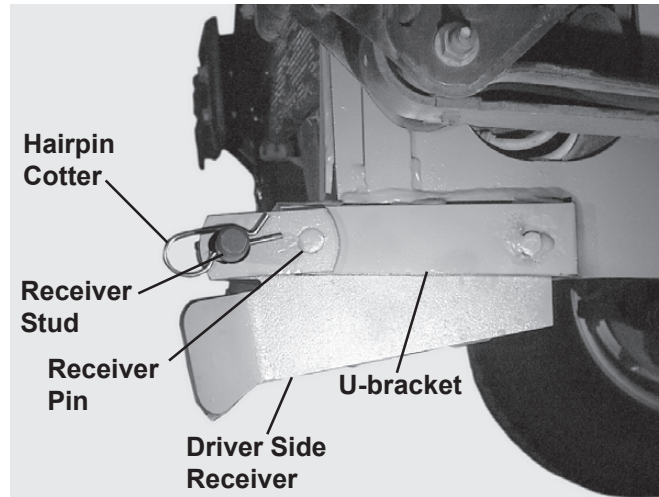


Photo 6

NOTE: After five to ten hours of snowplow usage, retorque all mount assembly fasteners.



WESTERN PRODUCTS
P.O. BOX 245038
MILWAUKEE, WI 53224-9538

 A DIVISION OF DOUGLAS DYNAMICS, L.L.C.

Western Products reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. Western Products and the vehicle manufacturer may require and/or recommend optional equipment for snow removal. Do not exceed vehicle ratings with a snowplow. Western Products offers a limited warranty for all snowplows and accessories. See separately printed page for this important information. The following are registered (®) trademarks of Douglas Dynamics, L.L.C.: UltraMount® and WESTERN®.